

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/155,676B  
Source: FFW16  
Date Processed by STIC: 4-7-05

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 04/07/2005

PATENT APPLICATION: US/09/155,676B

TIME: 09:33:54

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\04072005\I155676B.raw

3 <110> APPLICANT: WALLACH, David  
 4 MALININ, Nikolai  
 5 BOLDIN, Mark  
 6 KOVALENKO, Andrei  
 7 METT, Igor  
 9 <120> TITLE OF INVENTION: MODULATORS OF TNF RECEPTOR ASSOCIATED FACTOR (TRAF), THEIR  
 10 PREPARATION AND USE  
 12 <130> FILE REFERENCE: WALLACH=21  
 14 <140> CURRENT APPLICATION NUMBER: 09/155,676B  
 15 <141> CURRENT FILING DATE: 1999-01-04  
 17 <150> PRIOR APPLICATION NUMBER: PCT/IL97/00117  
 18 <151> PRIOR FILING DATE: 1997-04-01  
 20 <150> PRIOR APPLICATION NUMBER: IL 117800  
 21 <151> PRIOR FILING DATE: 1996-04-02  
 23 <150> PRIOR APPLICATION NUMBER: IL 119133  
 24 <151> PRIOR FILING DATE: 1996-08-26  
 26 <160> NUMBER OF SEQ ID NOS: 22  
 28 <170> SOFTWARE: PatentIn version 3.3  
 30 <210> SEQ ID NO: 1  
 31 <211> LENGTH: 1906  
 32 <212> TYPE: DNA  
 33 <213> ORGANISM: Homo sapiens  
 36 <220> FEATURE:  
 37 <221> NAME/KEY: misc\_feature  
 38 <222> LOCATION: (94)..(94)  
 39 <223> OTHER INFORMATION: n is a, c, g, or t  
 41 <220> FEATURE:  
 42 <221> NAME/KEY: misc\_feature  
 43 <222> LOCATION: (110)..(110)  
 44 <223> OTHER INFORMATION: n is a, c, g, or t  
 46 <220> FEATURE:  
 47 <221> NAME/KEY: misc\_feature  
 48 <222> LOCATION: (115)..(115)  
 49 <223> OTHER INFORMATION: n is a, c, g, or t  
 51 <220> FEATURE:  
 52 <221> NAME/KEY: misc\_feature  
 53 <222> LOCATION: (129)..(129)  
 54 <223> OTHER INFORMATION: n is a, c, g, or t  
 56 <220> FEATURE:  
 57 <221> NAME/KEY: misc\_feature  
 58 <222> LOCATION: (131)..(131)  
 59 <223> OTHER INFORMATION: n is a, c, g, or t  
 61 <220> FEATURE:

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62 <221> NAME/KEY: misc_feature
63 <222> LOCATION: (136)..(136)
64 <223> OTHER INFORMATION: n is a, c, g, or t
66 <220> FEATURE:
67 <221> NAME/KEY: misc_feature
68 <222> LOCATION: (202)..(202)
69 <223> OTHER INFORMATION: n is a, c, g, or t
71 <400> SEQUENCE: 1
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W--> 74 attcgaggcc acgaaggccg ggcggcgggc gcangcaccg gcccggggan aggcnccatg      120
76 agcggatcnc ngaacnatga caaaagacaa tttctgctgg agcgactgct ggatgcagtg      180
78 aaacagtgcc agatccgctt tngagggaga aaggagattg cctcggattc cgacagcagg      240
80 gtcacctgtc tgtgtgcccc gtttgaagcc gtcctgcagc atggcttgaa gaggagtcga      300
82 ggattggcac tcacagcggc agcgatcaag caggcagcgg gctttgccag caaaaccgaa      360
84 acagagcccg tgttctggta ctacgtgaag gaggctctca acaagcacga gctgcagcgc      420
86 ttctactccc tgcgccacat cgctcagac gtgggcccgg gtcgcgcctg gctgcgctgt      480
88 gccctcaacg aacactccct ggagcgctac ctgcacatgc tcttgcccga ccgctgcagg      540
90 ctgagcactt ttatgaaga ctggtctttt gtgatggatg aagaaaggtc cagtatgctt      600
92 cctaccatgg cagcaggtct gaactccata ctctttgcga ttaacatcga caacaaggat      660
94 ttgaacgggc agagtaagtt tgctccacc gtttcagacc tcttaaagga gtcaacgcag      720
96 aacgtgacct ccttgctgaa ggagtccacg caaggagtga gcagcctgtt caggagatc      780
98 acagcctcct ctgccgtctc catcctcacc aaacctgaac aggagaccga cccttgcttg      840
100 tcgtgtccag gaatgtcagt gctgatgcca aatgcaaaaa ggagcgggaag aagaaaaaga      900
102 aagtgaccaa cataatctca tttgatgatg aggaagatga gcagaactct ggggacgtgt      960
104 ttaaaaagac acctggggca ggggagagct cagaggacaa ctccgaccgc tctctgtca      1020
106 atatcatgtc cgcctttgaa agccccttcg ggcctaactc caatggaatc agagcagcaa      1080
108 ctcatggaaa attgattccc tgtctttgaa cggggagttt gggtagcaga agcttgatgt      1140
110 gaaaagcatc gatgatgaag atgtggatga aaacgaagat gacgtgtatg gaaactcatc      1200
112 aggaaggaag cacagggggc actcggagtc gcccgagaag ccaactggaag ggaacacctg      1260
114 cctctcccag atgcacagct gggtccgct gaagggtgct cacaatgact ccgacatcct      1320
116 cttccctgtc agtggcgtgg gtcctacag cccagcagat gccccctcgc gaagcctgga      1380
118 gaacgggaca ggaccagagg accacgttct cccggatcct ggacttcggt acagtgtgga      1440
120 agccagctct ccaggccacg gaagtcctct gagcagcctg ttacttctgc ctcagtgcc      1500
122 gagtccatga caattagtga actgcgccag gccactgtgg ccatgatgaa caggaaggat      1560
124 gagctggagg aggagaacag atcactgcga aacctgctcg acggtgagat ggagcactca      1620
126 gccgcgctcc ggcaagaggt ggacaccttg aaaaggaagg tggctgaaca ggaggagcgg      1680
128 cagggcatga aggtccaggc gctggccagc tatctttgct attttgtgag gagattctaa      1740
130 ccccacgtga gaacctatgt gtggagaaat ggaggagag agaaatccaa cagttcctga      1800
132 tagtctcatt tgagctcctg gatccagtct ttctgaagc tgtgtttcct ctggactttt      1860
134 catgtatgtg agccaataaa ttgctttcat tccttgaaaa aaaaaa      1906
137 <210> SEQ ID NO: 2
138 <211> LENGTH: 604
139 <212> TYPE: PRT
140 <213> ORGANISM: Homo sapiens
143 <220> FEATURE:
144 <221> NAME/KEY: misc_feature
145 <222> LOCATION: (1)..(1)
146 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
148 <220> FEATURE:

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PATENT APPLICATION: US/09/155,676B

TIME: 09:33:54

Input Set : A:\sequence\_listing.txt

Output Set: N:\CRF4\04072005\I155676B.raw

149 <221> NAME/KEY: misc\_feature  
150 <222> LOCATION: (6)..(6)  
151 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
153 <220> FEATURE:  
154 <221> NAME/KEY: misc\_feature  
155 <222> LOCATION: (8)..(8)  
156 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
158 <220> FEATURE:  
159 <221> NAME/KEY: misc\_feature  
160 <222> LOCATION: (13)..(13)  
161 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
163 <220> FEATURE:  
164 <221> NAME/KEY: misc\_feature  
165 <222> LOCATION: (15)..(15)  
166 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
168 <220> FEATURE:  
169 <221> NAME/KEY: misc\_feature  
170 <222> LOCATION: (37)..(37)  
171 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
173 <220> FEATURE:  
174 <221> NAME/KEY: misc\_feature  
175 <222> LOCATION: (271)..(271)  
176 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
178 <220> FEATURE:  
179 <221> NAME/KEY: misc\_feature  
180 <222> LOCATION: (274)..(274)  
181 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
183 <220> FEATURE:  
184 <221> NAME/KEY: misc\_feature  
185 <222> LOCATION: (334)..(334)  
186 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
188 <220> FEATURE:  
189 <221> NAME/KEY: misc\_feature  
190 <222> LOCATION: (348)..(348)  
191 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
193 <220> FEATURE:  
194 <221> NAME/KEY: misc\_feature  
195 <222> LOCATION: (354)..(355)  
196 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
198 <220> FEATURE:  
199 <221> NAME/KEY: misc\_feature  
200 <222> LOCATION: (359)..(359)  
201 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
203 <220> FEATURE:  
204 <221> NAME/KEY: misc\_feature  
205 <222> LOCATION: (363)..(363)  
206 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
208 <220> FEATURE:  
209 <221> NAME/KEY: misc\_feature

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TIME: 09:33:54

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\04072005\I155676B.raw

210 <222> LOCATION: (405)..(405)  
 211 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
 213 <220> FEATURE:  
 214 <221> NAME/KEY: misc\_feature  
 215 <222> LOCATION: (549)..(549)  
 216 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
 218 <220> FEATURE:  
 219 <221> NAME/KEY: misc\_feature  
 220 <222> LOCATION: (569)..(570)  
 221 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
 223 <400> SEQUENCE: 2

W--> 225 Xaa Thr Gly Pro Gly Xaa Gly Xaa Met Ser Gly Ser Xaa Asn Xaa Asp  
 226 1 5 10 15  
 229 Lys Arg Gln Phe Leu Leu Glu Arg Leu Leu Asp Ala Val Lys Gln Cys  
 230 20 25 30  
 233 Gln Ile Arg Phe Xaa Gly Arg Lys Glu Ile Ala Ser Asp Ser Asp Ser  
 234 35 40 45  
 237 Arg Val Thr Cys Leu Cys Ala Gln Phe Glu Ala Val Leu Gln His Gly  
 238 50 55 60  
 241 Leu Lys Arg Ser Arg Gly Leu Ala Leu Thr Ala Ala Ala Ile Lys Gln  
 242 65 70 75 80  
 245 Ala Ala Gly Phe Ala Ser Lys Thr Glu Thr Glu Pro Val Phe Trp Tyr  
 246 85 90 95  
 249 Tyr Val Lys Glu Val Leu Asn Lys His Glu Leu Gln Arg Phe Tyr Ser  
 250 100 105 110  
 253 Leu Arg His Ile Ala Ser Asp Val Gly Arg Gly Arg Ala Trp Leu Arg  
 254 115 120 125  
 257 Cys Ala Leu Asn Glu His Ser Leu Glu Arg Tyr Leu His Met Leu Leu  
 258 130 135 140  
 261 Ala Asp Arg Cys Arg Leu Ser Thr Phe Tyr Glu Asp Trp Ser Phe Val  
 262 145 150 155 160  
 265 Met Asp Glu Glu Arg Ser Ser Met Leu Pro Thr Met Ala Ala Gly Leu  
 266 165 170 175  
 269 Asn Ser Ile Leu Phe Ala Ile Asn Ile Asp Asn Lys Asp Leu Asn Gly  
 270 180 185 190  
 273 Gln Ser Lys Phe Ala Pro Thr Val Ser Asp Leu Leu Lys Glu Ser Thr  
 274 195 200 205  
 277 Gln Asn Val Thr Ser Leu Leu Lys Glu Ser Thr Gln Gly Val Ser Ser  
 278 210 215 220  
 281 Leu Phe Arg Glu Ile Thr Ala Ser Ser Ala Val Ser Ile Leu Ile Lys  
 282 225 230 235 240  
 285 Pro Glu Gln Glu Thr Asp Pro Cys Leu Ser Cys Pro Gly Met Ser Val  
 286 245 250 255  
 289 Leu Met Pro Asn Ala Lys Arg Ser Gly Arg Arg Lys Arg Lys Xaa Pro  
 290 260 265 270  
 293 Thr Xaa Ser His Leu Met Met Arg Lys Met Ser Arg Thr Leu Gly Thr  
 294 275 280 285  
 297 Cys Leu Lys Arg His Leu Gly Gln Gly Arg Ala Gln Arg Thr Thr Pro  
 298 290 295 300

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301 Thr Ala Pro Leu Ser Ile Ser Cys Pro Pro Leu Lys Ala Pro Ser Gly
302 305                      310                      315                      320
305 Leu Thr Pro Met Glu Ser Glu Gln Gln Leu Met Glu Asn Xaa Phe Pro
306                      325                      330                      335
309 Val Phe Glu Arg Gly Val Trp Val Pro Glu Ala Xaa Cys Glu Lys His
310                      340                      345                      350
313 Arg Xaa Xaa Arg Cys Gly Xaa Lys Arg Arg Xaa Arg Val Trp Lys Leu
314                      355                      360                      365
317 Ile Arg Lys Glu Ala Gln Gly Pro Leu Gly Val Ala Arg Glu Ala Thr
318                      370                      375                      380
321 Gly Arg Glu His Leu Pro Leu Pro Asp Ala Gln Leu Gly Ser Ala Glu
322 385                      390                      395                      400
325 Gly Ala Ala Gln Xaa Leu Arg His Pro Leu Pro Cys Gln Trp Arg Gly
326                      405                      410                      415
329 Leu Leu Gln Pro Ser Arg Cys Pro Pro Arg Lys Pro Gly Glu Arg Asp
330                      420                      425                      430
333 Arg Thr Arg Gly Pro Arg Ser Pro Gly Ser Trp Thr Ser Val Gln Cys
334                      435                      440                      445
337 Gly Ser Gln Leu Ser Arg Pro Arg Lys Ser Ser Glu Gln Pro Val Thr
338                      450                      455                      460
341 Ser Ala Ser Val Pro Glu Ser Met Thr Ile Ser Glu Leu Arg Gln Ala
342 465                      470                      475                      480
345 Thr Val Ala Met Met Asn Arg Lys Asp Glu Leu Glu Glu Glu Asn Arg
346                      485                      490                      495
349 Ser Leu Arg Asn Leu Leu Asp Gly Glu Met Glu His Ser Ala Ala Leu
350                      500                      505                      510
353 Arg Gln Glu Val Asp Thr Leu Lys Arg Lys Val Ala Glu Gln Glu Glu
354                      515                      520                      525
357 Arg Gln Gly Met Lys Val Gln Ala Leu Ala Ser Tyr Leu Cys Tyr Phe
358                      530                      535                      540
361 Val Arg Arg Phe Xaa Pro His Val Arg Thr Met Trp Trp Arg Asn Gly
362 545                      550                      555                      560
365 Gly Arg Glu Lys Ser Asn Ser Ser Xaa Xaa Ser His Leu Ser Ser Trp
366                      565                      570                      575
369 Ile Gln Ser Phe Leu Lys Leu Cys Phe Leu Trp Thr Phe His Val Cys
370                      580                      585                      590
373 Glu Pro Ile Asn Cys Phe His Ser Leu Lys Lys Lys
374                      595                      600
377 <210> SEQ ID NO: 3
378 <211> LENGTH: 2631
379 <212> TYPE: DNA
380 <213> ORGANISM: Homo sapiens
383 <220> FEATURE:
384 <221> NAME/KEY: misc_feature
385 <222> LOCATION: (1081)..(1081)
386 <223> OTHER INFORMATION: n is a, c, g, or t
388 <220> FEATURE:
389 <221> NAME/KEY: misc_feature
390 <222> LOCATION: (1102)..(1102)

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**RAW SEQUENCE LISTING ERROR SUMMARY**  
**PATENT APPLICATION: US/09/155,676B**

DATE: 04/07/2005  
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Input Set : A:\sequence listing.txt  
 Output Set: N:\CRF4\04072005\I155676B.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 94, 110, 115, 129, 131, 136, 202  
 Seq#:2; Xaa Pos. 1, 6, 8, 13, 15, 37, 271, 274, 334, 348, 354, 355, 359, 363, 405, 549, 569  
 Seq#:2; Xaa Pos. 570  
 Seq#:3; N Pos. 1081, 1102, 1120, 1125, 1129, 1135, 1146, 1170, 1180, 1188, 1208, 1239  
 Seq#:3; N Pos. 1248, 1249, 1278, 1297, 1310, 1322, 1345, 1409, 1423, 1445, 1452, 1459  
 Seq#:3; N Pos. 1478, 1498, 1507, 1508, 1520, 1534, 1540, 1546, 1557, 1713, 1895, 1900  
 Seq#:3; N Pos. 1934, 1942, 1951, 1962, 1967, 1974, 1984, 1988, 1994, 2005, 2012, 2024  
 Seq#:3; N Pos. 2030, 2044, 2059, 2067, 2090, 2098, 2099, 2107, 2113, 2119, 2128, 2136  
 Seq#:3; N Pos. 2143, 2148, 2165, 2172, 2192, 2206, 2220, 2221, 2226, 2245, 2253, 2294  
 Seq#:3; N Pos. 2327, 2427  
 Seq#:4; N Pos. 53  
 Seq#:5; Xaa Pos. 18, 320, 338, 356, 358, 388

**Invalid <213> Response:**

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:8, 9, 10, 11, 21, 22

**VERIFICATION SUMMARY**

DATE: 04/07/2005

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Input Set : A:\sequence listing.txt

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L:74 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:60  
M:341 Repeated in SeqNo=1  
L:225 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
M:341 Repeated in SeqNo=2  
L:770 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1080  
M:341 Repeated in SeqNo=3  
L:835 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:920 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16  
M:341 Repeated in SeqNo=5